



March 21, 2014

VIA FEDERAL EXPRESS

Ms. Katharine K. Buckner
Sandhills and Pulp & Paper Permitting Section
Engineering Services Division
Bureau of Air Quality
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

Re: Resolute FP US Inc.
Part 70 Operating Permit TV-2440-0005
Permit Renewal Application
Response to March 7 and 10, 2014 Questions

Dear Ms. Buckner:

On behalf of Resolute FP US Inc., please find the attached response to questions that you requested by electronic mail on March 7 and 10, 2014.

If you have any questions, require further clarification, or need additional information regarding the application or this submittal, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, reading "Steven R. Moore", is enclosed within a thin black rectangular border.

Steven R. Moore
URS Corporation

Attachment

cc: Mr. Dale Herendeen – Resolute FP US Inc.

**DHEC Title V Renewal Questions – March 7 and March 10, 2014
Resolute FP 2440-0005**

Resolute Response – March 21, 2014

DHEC Question/Comment:

Construction permit – CH issued July 29, 1992 was for the conversion of the No. 3 Recovery Boiler ESP East chamber from a wet to dry bottom. Was this work completed? If so, should the modification date of 1992 show up for this ESP in the equipment listing?

Resolute Response:

This project was never completed.

DHEC Question/Comment:

Construction permit –CU issued April 8, 2002 was for the installation of 5 diesel powered pumps at the wastewater treatment plant.

- Should the Aerated Stabilization Basin and Tertiary Treatment Plant be noted as having two pumps each?
- The size stated in the c/p for the No. 1 Holding Basin Pump No. 2 is 345 hp. The permit app says 325 hp. Which is correct?

Resolute Response:

The aerated stabilization basin pumps (2 pumps) and the tertiary treatment plant pumps (2 pumps) are no longer in service.

ID 2903 is No. 1 holding Pond, pump No. 2, installed 1999, and it is a CAT. It is 345 HP.

DHEC Question/Comment:

Construction permit –CV issued June 10, 2002 was for the installation of a diesel powered pump at the wastewater treatment plant. No. 1 Holding Basin Pump No. 1 was specified in the permit. The pump size specified in the permit was 325 hp. The TV app says 345 hp. Which is correct? Was this transposed with the No. 2 Pump (as seen in c/p-CU)?

Resolute Response:

ID 2902 is No. 1 holding pond, pump No. 1, installed 1988, and is the Cummins. It is 325 HP.

DHEC Question/Comment:

Emission Unit ID 11 contains two sources – “Equipment Leaks & Cleaning Material Usage” and “Miscellaneous Material Usage”. What sort of equipment comprises each of these? What are the emission estimates for each? Do these need to be part of this permitted source? Can these two sources be moved to the Insignificant Activities list (Attachment B)?

Resolute Response:

These sources are also listed in the insignificant activities list on Form G. They are included in the air emission inventory under “oil and lube tanks” and “coating and additive tanks”.

DHEC Question/Comment:

Calculations for:

- Oxygen Delig., Knotters, –
 - o VOC as C emission factor, Footnote “F” says this is the sum of the TRS pollutants. When totaling these pollutants (cells D293-D296) from the emission calculation spreadsheet I get 9.3E-3. How where does 2.0E-1 come from?
- Knotters – the factor used for methyl mercaptan does not match that in NCASI TB 858, Table 4 (2.1E-5). From where did this emission factor come (1.3E-3)?
- Screens –
 - o Formaldehyde is present in the TB 858 but was not included in your emission calculation sheet. Please add.
- Sulfur Dioxide – please explain the calculations for this. I understand the conversion equation from TRS to SO₂. You use a control efficiency of 32.5% - why? There doesn't appear to be a control device on ID 02 for SO₂ emissions. Why is the TRS being converted?
- Sample calculation – Is there a sample calculation in the TV renewal application or emission calculation spreadsheet for converting from “as C” basis to the predominant VOC. Was the “predominant VOC” denoted somehow in the various calculation sheets? If not, is “predominant” referring to the pollutant that is a VOC and has the highest emission from the particular source? For instance, would Terpenes be the predominant from the Digester Chip Bin?
- Methyl Ethyl Ketone (MEK) has been delisted from being a HAP. It shows up as a HAP on your calculation sheets. Is it being added in with the Total HAPs? Please correct.

Resolute Response:

- o Footnote F has been corrected to reference TB 858, Table 4.8 for the VOC as C emission factor (2.0E-1) from the Oxygen Delignification system.
- o The methyl mercaptan emission factor for the knotters has been corrected from the TRS as S factor (1.3E-1) to the correct factor of 2.1E-5.
- o The formaldehyde emission factor for the screens from TB 858 has been added.
- o The SO₂ control efficiency of 32.5% is from sulfur capture by the bark ash in the combination boilers, as permitted in CP-DC. Please also note the control efficiency is higher for the evaporator and turpentine system because of the in-line TRS scrubber (50% removal of TRS before the combination boilers).
- o The VOC as C calculations were provided to the Department on Monday March 10, 2014 via electronic mail.
- o Methyl Ethyl Ketone (MEK) has been removed from the list of HAPs as requested.

DHEC Question/Comment:

Emission Factors from NCASI TB738:

- Methylene chloride appears in Table 5-26 for the emission factors for the TMP process. However, no factor was used on your calculation sheet. Please add this factor and calculations to your sheet or provide an explanation why it should not be used.
- Should the pollutants from Table 5-27 be added to the calculations?
- VOC as carbon emission factor – the original factor is 5.98E-02 kg/MTP. What does MTP stand for? Just want to make sure I understand the conversion to lb/ADTP

Resolute Response:

- o Methylene Chloride from TB 738, Table 5-25 has been added to TMP.
- o The emissions from the extended analyte list in Table 5-27 represent a single canister sample from five of the seventeen TMP vents tested. Since the vast majority of the HAPs were non-detect in all five canisters, the results from Table 5-27 were not included in the emission inventory.
- o kg/MTP = kilogram per metric ton pulp.

DHEC Question/Comment:

- 1) Pg 2 of 17, third Line (Subparts F-R; T-LL...) The Citation column for this row ends "EEEE-" Is there anything that follows the EEEEE? It looks like there should be with it ending with a hyphen.
- 2) Page 2 of 17 - There are several rules for NESHAP part 63 that are mislabeled as Part 61 on this page. Please correct.
- 3) Pg 4 of 17 – Applicability was not indicated for 40 CFR 60, Subpart O – Sewage Treatment Plants. Please correct.
- 4) The listing in Form K for 40 CFR 60 goes up to YYY – which this regulation does not appear to exist. What about the remainder of the 40 CFR 60 regs – AAAA-OOOO?
- 5) 40 CFR 63 – Subpart Y is not included (labeled as Z) and Z is reserved. 7H is not included in list nor addressed.
- 6) 40 CFR 63, Subpart ZZZZ – please double check the applicability of this rule. Does Resolute have any emergency generators on site? Would the various pumps permitted in the WWTP be subject to this rule?

Resolute Response:

1. The list has been extended through "7H" on Form K.
2. These references have been corrected.
3. 40 CFR 60 Subpart O does not apply, this has been corrected on Form K.
4. 40 CFR 60, Subpart XXX-OOOO have been added to Form K.
5. 40 CFR 63 Subpart Y was mislabeled Z, this has been corrected on Form K, Z is reserved. 7H has been added to Form K.
6. 40 CFR 63, Subpart ZZZZ is applicable, Form K has been corrected.